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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,897	12/18/2001	Ulrich Holeschovsky	Mo6805/MD-99-88-PU	2174

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EXAMINER	
HARAN, JOHN T	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/028,897	HOLESCHOVSKY ET AL.	
	Examiner	Art Unit	
	John T. Haran	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) *1-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *12/18/01* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-14, drawn to a tufted good, classified in class 428, subclass 85+.

   II. Claims 15-30, drawn to a process for producing a tufted good, classified in class 156, subclass 272.6.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made without the corona treatment of the film or it can be made by laminating the corona treated film to the precoat or foam layer and then bonding these layers to the greige good.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Denise Brown on August 6, 2003, a provisional election was made with traverse to prosecute the invention of Group II, claims 15-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on 12/18/01 has been considered by the examiner.

Claim Objections

7. Claim 25 is objected to because of the following informalities: It appears that the power density range should be .2 to 20 not .1 to 20. There is no antecedent basis for 0.1 in the specification and throughout the specification the range is stated to be 0.2 to 20. It appears the 0.1 was a typo. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 15-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15 is indefinite because it is directed to a process for producing a tufted good but there is no limitation in the requiring any of the assembled layers to include

tufts. It is unclear if the term "greige good" includes a tufted layer. Also it is unclear where the precoat is in relation to the greige good and the flexible film and if the flexible film is adhered to the precoat or the greige good. It is suggested to amend the claim as follows to correct the aforementioned problems as follows:

- - 15. A process for producing a tufted good comprising:

(A) treating a flexible film with corona-discharge at a power density of 0.2 to 20 Ws/cm2;

(B) providing a greige good comprising one or more fibers tufted into a primary backing;

(C) applying a precoat to a back surface of the greige good;

(D) contacting the treated flexible film with an uncured or partially uncured back surface of the precoat;

and

(E) curing the article formed in (D). - -

It is noted that similarly claim 16 should be amended to read - - to the back surface of the precoat - -.

Claim 25 is indefinite because it is directed to a process for producing a tufted good but there is no limitation in the requiring any of the assembled layers to include tufts. It is unclear if the term "greige good" includes a tufted layer. It is suggested to amend claim 25 to add a step of - - providing a greige good comprising one or more fibers tufted into a primary backing - -.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irwin (U.S. Patent 5,612,113) in view of Langsdorf et al (U.S. Patent 6,299,715).

Irwin is directed to a method of making a carpet wherein a primary backing with fibers tufted into it (greige good) is coated on its back surface with a precoat such as polyurethane adhesive and a flexible film, such as polypropylene, that has been corona treated in order to enhance the adhesive properties of the film, is contacted to the back surface of the precoat (Column 4, lines 15-41 and Column 2, lines 46-56).

Irwin is silent towards the power density of the corona discharge applied to the film. One skilled in the art would have readily appreciated that the power density would depend upon a variety of factors such as the material of the film, the material is to be bonded with, the thickness of the film, etc. It would have been within the purview of one skilled in the art to determine the optimum power density for achieving the desired adhesion of the film to the precoat keeping these factors in mind and only the expected results would be achieved. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine the applicable power density range for the corona discharge in order to achieve the desired adhesion of the film to the precoat in the method of Irwin.

Irwin is also silent towards curing the polyurethane adhesive precoat, however one skilled in the art would have readily appreciated that the precoat would not be fully cured until after the treated flexible film is applied in order to ensure adequate adhesion. Furthermore it is known in the carpet art to apply polyurethane adhesive to a primary carpet backing and fully cure the adhesive after a flexible polypropylene film has been applied, as shown in Langsdorf et al (Column 1, lines 11-14; Column 4, lines 36-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made not to fully cure the precoat until after the flexible film, which has been treated with corona discharge within the optimum power density range, has been applied in the method of Irwin, as suggested by Langsdorf et al.

Regarding claim 16, Langsdorf et al teaches applying multiple layers for the precoat and that they can be foams (Column 10, lines 32-43) and as noted above they are not fully cured until after the flexible film has been applied. It would have been obvious to use a known combination of adhesive and foam to apply to a greige good before applying a flexible film in the method of Irwin, as modified above.

Regarding claim 17, Irwin teaches adhering a foam layer to the back surface of the corona treated flexible film (Column 4, lines 39-41).

Regarding claim 18, one skilled in the art would have readily appreciated that the curing temperature and duration would depend upon a variety of factors such as the material worked upon, the thickness of the adhesive, the intensity of the curing source, etc. It would have been within the purview of one skilled in the art to determine the

parameters for achieving an adequate adherence and to determine the optimum parameters. It would have been obvious to determine the optimum parameters.

Regarding claims 19 to 21, it is well known and conventional in the carpet art to have precoats and foams that comprise reactive polyurethane systems, as shown for example in Langsdorf et al (Column 5, line 36). It would have been obvious to use known materials for the foam and precoat in the method of Irwin, as modified above.

Regarding claim 22, Irwin teaches using polyolefin films such as polypropylene or polyethylene (Column 2, lines 46-48).

Regarding claim 23, Irwin teaches using a flexible film with a thickness between 1 and 5 mils (.025 to .127 mm).

Regarding claim 24, as noted above it would have been obvious to one of ordinary skill in the art to determine the applicable power density range for the corona discharge and to determine the optimum range.

12. Claims 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langsdorf et al (U.S. Patent 6,299,715) in view of Irwin (U.S. Patent 5,612,113).

Langsdorf et al teach a method of making a carpet wherein the back surface of a greige good is coated with a precoat adhesive and that the adhesive can be a foamable system (Column 10, lines 24-29). A secondary backing in the form of a flexible film such as polypropylene is applied to the foam layer on the greige good and the foam layer is fully cured to form a bonded article (Column 1, lines 11-14; Column 4, lines 36-

61). Langsdorf et al is silent towards corona treating the flexible polypropylene film within the claimed power density range prior to applying the film to the greige good.

Irwin is directed to a method of making a carpet wherein a primary backing with fibers tufted into it (greige good) is coated on its back surface with a precoat such as polyurethane adhesive and a flexible film, such as polypropylene, that has been corona treated in order to enhance the adhesive properties of the film, is contacted to the back surface of the precoat (Column 4, lines 15-41 and Column 2, lines 46-56).

One skilled in the art would have readily recognized in the carpet art is desirable for such flexible films to remain adequately adhered to the greige good and it would have been obvious to take known steps to ensure adequate adhesion of the flexible polypropylene film to the foam layer in the method of Langsdorf et al, such as corona treating the film prior to application as suggested in Irwin. Additionally, one skilled in the art would have readily appreciated that the power density would depend upon a variety of factors such as the material of the film, the material is to be bonded with, the thickness of the film, etc. It would have been within the purview of one skilled in the art to determine the optimum power density for achieving the desired adhesion of the film to the precoat keeping these factors in mind and only the expected results would be achieved. It would have been obvious to one of ordinary skill in the art at the time the invention was made to treat the flexible polypropylene with corona discharge in order to enhance its adhesive properties in the method of Langsdorf et al as suggested in Irwin and to determine the applicable power density range for the corona discharge in order to achieve the desired adhesion of the film to the foam.

Regarding claim 26, Langsdorf et al teaches using a reactive polyurethane system (Column 10, line 57).

Regarding claim 27, one skilled in the art would have readily appreciated that the curing temperature and duration would depend upon a variety of factors such as the material worked upon, the thickness of the adhesive, the intensity of the curing source, etc. It would have been within the purview of one skilled in the art to determine the parameters for achieving an adequate adherence and to determine the optimum parameters. It would have been obvious to determine the optimum parameters.

Regarding claim 28, Langsdorf et al teaches the flexible film is polypropylene, which is a polyolefin.

Regarding claim 29, Irwin teaches using a flexible film with a thickness between 1 and 5 mils (.025 to .127 mm) and it would have been obvious to apply flexible films of known thickness in the method of Langsdorf et al, as modified above.

Regarding claim 30, as noted above it would have been obvious to one of ordinary skill in the art to determine the applicable power density range for the corona discharge and to determine the optimum range.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(703) 305-0052 or (571) 272-1217 as of 12/19/03**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (703) 308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

John T. Haran
Examiner
Art Unit 1733